

WESTERN SYDNEY
UNIVERSITY



WESTERN HEALTH

OUR DECADAL COMMITMENT TO
THE HEALTH OF OUR REGION



**WE ARE
WESTERN
SYDNEY**

MESSAGE FROM THE VICE-CHANCELLOR AND PRESIDENT



Western Sydney is Australia's third-largest economy and fastest growing region. What happens here in the next two decades will have a transformational impact on the nation. Health is the overarching and central priority. It dictates our success in all aspects of life.

Western Sydney's resilience in the face of complex and unprecedented challenges in health will be tested, not just in terms of system capacity, but our ability to manage new and existing challenges at the community level. We simply cannot afford to fail.

Western Health sets-out Western Sydney University's commitment to the health of its region in the coming decades.

Health is the overarching and central priority.

Through to 2038, we will address and, where possible, overcome and shape generational challenges in the following priority areas:

- Chronic Disease
- Healthy Ageing
- Midwifery, Maternal and Child Health
- Mental Health and Wellbeing
- Health Innovation

These priorities are unequivocally led by the needs of our region. They are guided by the planning and policy frameworks of our industry and partners. And are driven by our unrivalled record in teaching and research excellence across Western Sydney and internationally.

We will advance these priorities in every aspect of Western Sydney University's operations and development over the next two decades and beyond. Western Sydney University is embedded in every major health and education precinct in our region: Bankstown, Blacktown-Mt Druitt, Camden, Campbelltown, Liverpool, Penrith and Westmead.

Across our medical, nursing, psychology, health sciences, allied health and health management fields we have over 12,500 students in clinical or related placements in every major hospital throughout the region.

Through our Translational Health Research Institute, MARCS Institute for Brain, Behaviour and Development, and NICM Health Research Institute, our research teams are bringing the best evidence and breakthroughs in health to advance outcomes on the ground in Western Sydney and across the world.

We are bringing over \$1.2 billion in commercial and industry-partnered investment.

With our industry and government partners we run 'Launch Pad', Western Sydney's first and only network of startup incubators, where the region's entrepreneurial spirit is cultivated to shape and drive new innovations in health.

We are bringing over \$1.2 billion in commercial and industry-partnered investment in the most advanced health and educational infrastructure to Western Sydney in the next ten years alone, with more to follow in the subsequent decade.

The sheer scale of the challenge, the unrivalled depth of our commitment to this region, and the extraordinary possibilities that world-class teaching and research brings, demand we do even more. That's what this strategy sets out. That's what we will do.

A stylized, handwritten signature in black ink, consisting of a large, flowing 'B' followed by a series of loops and a final horizontal stroke.

**PROFESSOR BARNEY GLOVER FTSE
VICE-CHANCELLOR AND PRESIDENT
WESTERN SYDNEY UNIVERSITY**



HEALTH RESILIENCE

By 2038, increasing life expectancy, coupled with declining fertility rates, will create a population with a record high level of retirees. This will be most felt in Western Sydney where the proportion of the region's population aged over 65 will grow by an additional 15 per cent.

A growing older population will place greater demands on acute and preventive allied health and non-clinical health services, which are geared towards combating the growth of the so-called 'lifestyle diseases' including obesity, diabetes and heart disease.

Sydney's chronic disease hotspots in the west and south-west will see the biggest population rises and carry the biggest burden. These areas already contend with some of the longest Emergency Department wait times in Australia.

The number of days of temperatures of 35°C or above is projected to almost double by 2038, as are levels of population density, lone-occupancy, rates of homelessness and socio-economic inequity. These changes will test resilience at all levels.

RESEARCH EXCELLENCE

Advances in health services rely on advances in research.

Western Sydney University has invested exponentially in expanding its research capacity. By 2038, Western Sydney University commits to working with our partners, students, patients, outpatient clinics and our region to advance the rate of knowledge and understanding in health research. Our goal is to ensure this research bears fruit directly on the ground in Western Sydney, and beyond. Because this work won't be finished tomorrow.

OUR RESEARCH IN NUMBERS

Since 2008, we've been awarded more than

\$172m

in health and wellbeing research income.

This has allowed our researchers to work intensively on over

3,200

health and wellbeing projects in the last decade alone.

These projects span all modes of research — from working at a molecular level in laboratories, right through to an integrated model of working alongside patients in local hospitals.

STUDENT ENGAGEMENT IN OUR REGION

THE NUMBERS

Western Sydney's current population of 1.9 million is conservatively expected to grow to 3 million by 2038. Consequently, our region will face challenges in chronic disease, ageing, childhood and mental health at an unprecedented scale and intensity.

Expanding the University's research and teaching capacity in health disciplines is one of the many ways we plan to respond to these challenges. By 2038, Western Sydney University commits to working with our partners and region in securing and integrating the following students on the ground. This is our commitment to training the next generation of leaders.

2018

2038

678

1,400

MEDICAL STUDENTS

We will increase our medical school capacity and placements to keep pace with regional growth and heightened complexity, including 60 places at Nepean Hospital. Areas of heightened teaching and research focus will be Aboriginal and Torres Strait Islander health, new models of community based care, medical homes, super clinics, subacute and aged care. Our research and partnership emphasis will be on evidenced improvements in tertiary hospital care, children's care and mental health care.

4,677

9,400

NURSING AND MIDWIFERY STUDENTS

We will maintain our status as Australia's highest independently ranked nursing program and increase our clinical and graduate placements, particularly in high-demand sites and in priority fields like ageing, mental health, childhood obesity, diabetes, maternal and child health, as well as community health.

6,573

13,200

HEALTH SCIENCES, PSYCHOLOGY, COMMUNITY AND ALLIED HEALTH STUDENTS

We will place research at the heart of everything we do in key scientific, allied, social and community-embedded health and wellbeing fields, with a particular emphasis on mental health, technology, preventative strategies, healthy living and community resilience.



WORKING TOGETHER WITH OUR PARTNERS

Nobody can do it alone. Improvements to our health system and the health of our region, will only come from strong partnerships between health practitioners, researchers, industry, policy makers and, of course, patients.

Western Sydney University is proud to be working in partnership with many Local Health Districts (LHD) across NSW; including South Western Sydney LHD, Western Sydney LHD, Nepean Blue Mountains LHD, South Eastern Sydney LHD and Western NSW LHD – and Primary Health Networks (PHN) including WentWest, Nepean Blue Mountains PHN and South Western Sydney PHN.

Change we can collaboratively achieve locally can extend across Australia and internationally.

Our collaborations with non-government organisations and peaks, include partnerships with groups like Tharawal Aboriginal Medical Services, Karitane, and NSW Service for the Treatment and Rehabilitation of Torture and Trauma Survivors. These links are incredibly important to the health of our region, now and in the decades ahead. They are deeply valued. These organisations are the foundation of integrated health care delivery and health policy in our region. Working hand-in-hand with them is vital to ensuring our research and education programs translate into real impact for our community.

Our corporate links are equally valued, and we are committed to partnering in health innovations with firms like GE Health, KPMG, Macquarie Bank, Madison Marcus, Google Australia and PwC, among many others.

The links we have forged through our 'Launch Pad' network with health-related startups are equally critical, particularly in bringing disruptive technologies, new innovations and generational change to collaborations.

Lastly, but very importantly, we are committed to achieving optimal health outcomes for Western Sydney with our education partners, like, for example, our work with the University of Sydney at Westmead and Nepean, the University of New South Wales at Liverpool, and Charles Sturt University throughout regional NSW.

We know from experience, that the change we collaboratively achieve locally can extend across Australia and beyond. Our partnerships bring a depth of vision to our work, that enables the ripples we create in Western Sydney to reach around the world.





**THE LINKS WE HAVE FORGED WITH
HEALTH RELATED STARTUPS ARE JUST AS
CRITICAL AS LARGE SCALE CORPORATE
PARTNERSHIPS.**

Western Sydney University's 'Launch Pad' entrepreneur, Olga Moore, partnered with Western Sydney researchers to build sensory and biometrics monitoring technology into clothing, including a heart rate monitor, distance tracking and respiration scanner.

HEALTH TECHNOLOGY DIGITAL TRANSFORMATION

Digital transformation has been a central priority for Western Sydney University for nearly a decade. From our investment in world-leading Internet of Things (IoT) and Immersive Reality technology at our campuses, through to our establishment of 'Launch Pad', Western Sydney's first network of start-up incubators, the University is leading the region in harnessing the potential of digital technology to transform health for all.

Nowhere is the urgency to adopt digital technology greater than in health. The University is well-ahead in this regard, through the work of research entities like our MARCS Institute for Brain Development and Behaviour, THRI, NICM Health Research Institute, and our Living Lab network.

Nowhere is the urgency to adopt digital technology greater than in health.

Research teams in these areas don't simply engage with technology as static tools. Rather, they advance our understanding of technology as a setting that powerfully shapes experiences of health and wellbeing. Understanding how the digital contributes to health will be critical to addressing health inequalities into the future.

Health and wellbeing startups are pushing the boundaries in what's possible.

Arriving at the right spatial application and thematic focus of technology is also crucial in improving health across Western Sydney. The University is leading this approach at Liverpool where robotics and automation are becoming industry-research collaboration features of the Precinct.

Across the Launch Pad network, health start-ups are pushing the boundaries in what is possible with 3D-printed transplant matter, artificial intelligence, health informatics, digital communities of care, health apps and med-tech devices.

Through our Living Lab network, our researchers are collaborating with over 100 partners across government, industry and business to co-research, design and create technology-based responses to persistent and new challenges in mental health and wellbeing, education and policy.

Over the next two decades the University's application of digital health and wellbeing platforms in teaching and research across the region's health network will become second-nature and infused in every aspect of our work in this critical area.

DIGITAL 2038

By 2038, the University's digital health footprint will have expanded into a network of thematically focused, collaborative and inter-linked hubs.

Agritech

Richmond

By 2038, food security, health and nutrition priorities will see the University's glasshouse research program quadruple in scale to connect world-leading cropping research and production capacity into Greater Sydney and South East Asia via the Western Sydney Airport.

Interface

Blacktown

Blacktown in 2038 will be a world leader in health service interface, harnessing digital platforms to enhance care pathways for healthy weight management.

Digital

Penrith

eHealth, digital clinical trials and 3D-print medical applications, will be the focus of a site linked directly to the Airport by rail.

Memory

Western Sydney Network

World leading dementia, memory and ageing research will be rolled out across multiple community facing sites in Western Sydney.

Biomedicine

Westmead

Now into their second decade at Westmead, the MARCS Institute will push technology assisted biomedical and machine-driven advances in research into new areas of health care. The NICM Health Research Institute will forge new partnered innovations into China and Asia more broadly.

Living Labs

Parramatta

Our network of Living Lab initiatives will continue to see end-user driven co-research, design and development of technology-based responses to intergenerational challenges in health.

Exchange

Western Sydney Airport

The Airport and Aerotropolis will see the University embedded as a key partner in a multi-university institute for health and engineering.

Platforms

Bankstown

Digital 'communities of care' will be pioneered in tandem with multi-disciplined clinical platforms that see health professionals work cohesively to optimise personal and community mental health and social inclusion.

Analytics

Sydney Olympic Park

Informatics will drive innovations in health, drawing on the University's digital analytics capacity at Parramatta and its sports science and performance expertise at Olympic Park.

Liveability

Camden

Technology augmented community health, liveability, and resilient urban design will be the focus of one the region's most populous residential areas.

Robotics

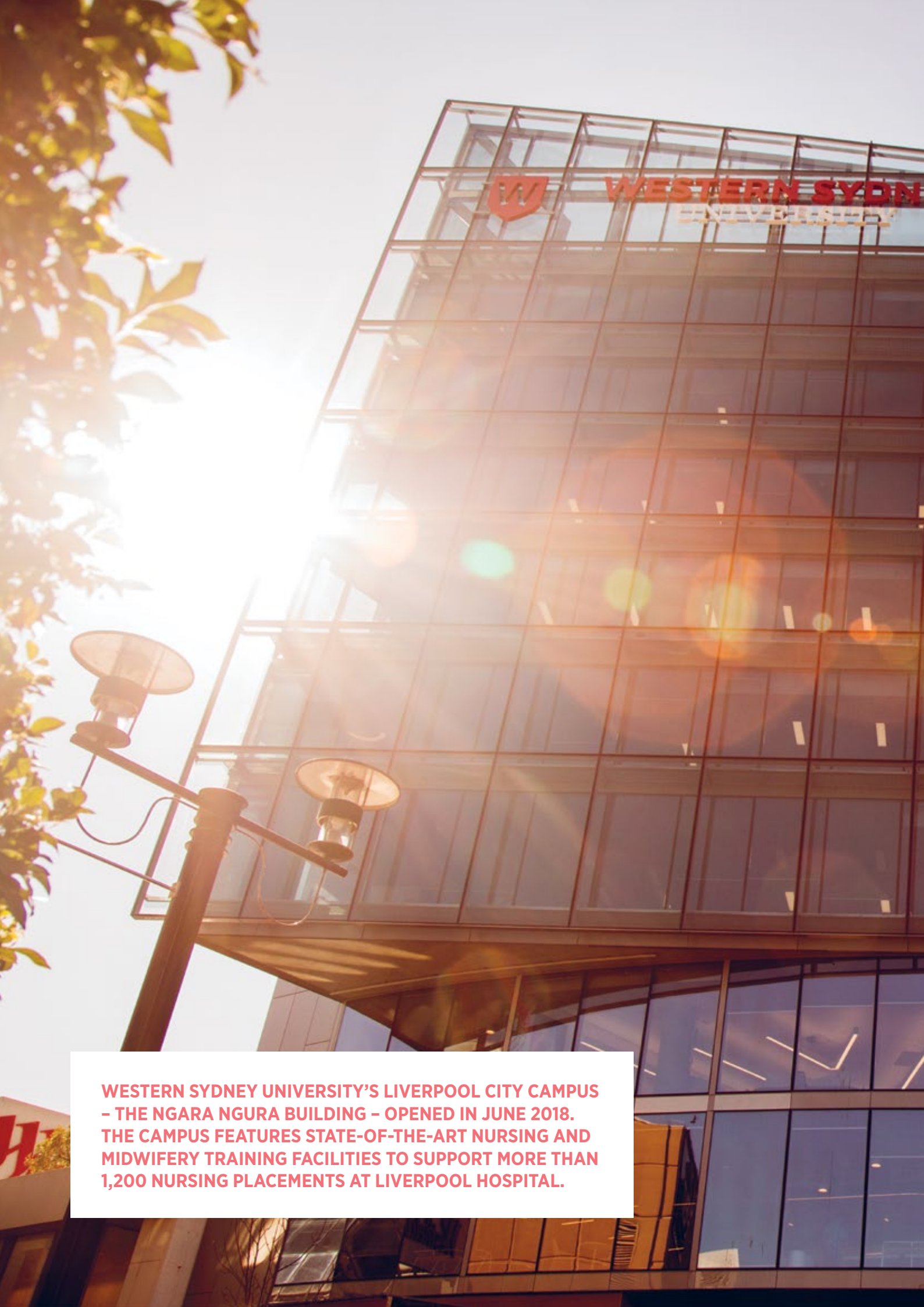
Liverpool

Robotic and automated surgery will be the definitive, internationally-recognised attribute of the Liverpool Innovation Precinct, attracting partnerships and investment to a collaborative program pioneered and led by Western Sydney University.

Medicine

Campbelltown

The University's School of Medicine will have doubled in size and intensified its infusion of digital and technological innovation in medicine addressing Aboriginal and Torres Strait Islander health, community based care, medical homes, super clinics, subacute and aged care.



WESTERN SYDNEY UNIVERSITY'S LIVERPOOL CITY CAMPUS – THE NGARA NGURA BUILDING – OPENED IN JUNE 2018. THE CAMPUS FEATURES STATE-OF-THE-ART NURSING AND MIDWIFERY TRAINING FACILITIES TO SUPPORT MORE THAN 1,200 NURSING PLACEMENTS AT LIVERPOOL HOSPITAL.



NGARA
NGURA
BUILDING

WESTERN SYDNEY UNIVERSITY EMBEDDED IN OUR REGION

The contribution Western Sydney University makes to its region is extraordinary and without peer.

In placement roles at hospitals, clinical sites and critical health infrastructure across Western Sydney and regional NSW, the University's students put in over 6.5 million combined hours per year.

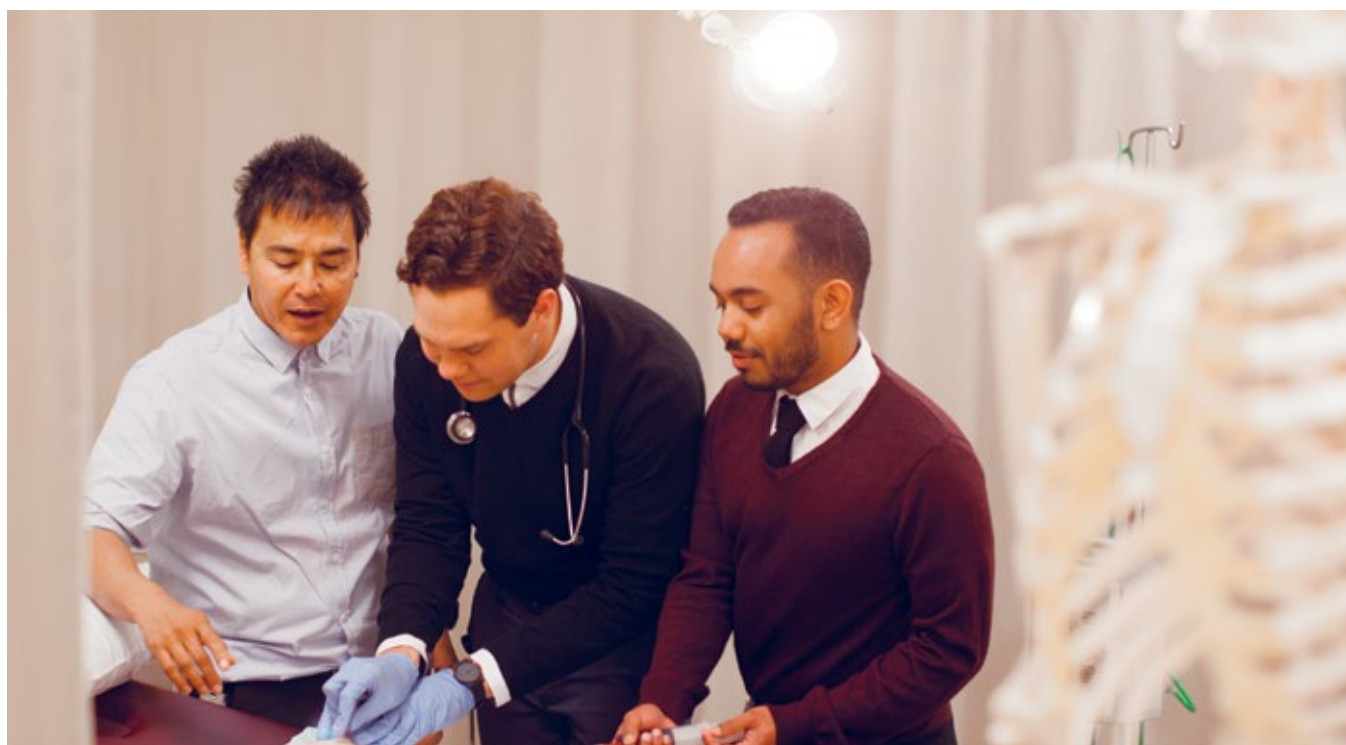
In terms of direct teaching and research infrastructure investment into improving the health of the region and further afield, the University generated over \$500 million in 2017 alone.

No other institution, educational or otherwise, makes such a large commitment to the health of its region. No other Australian university makes a proportional investment of this scale in health.

Now in its tenth year, the university's School of Medicine has graduated over 800 medical professionals since its first intake. The bulk of those graduates choose to stay and apply their skills in the region; Australia's fastest growing population.

But the rate of population, urban and economic growth across Western Sydney over coming decades requires, at the very least, a reciprocal expansion of the University's health capacity. At best, it can continue to evolve as a world-leading exemplar and enabler of optimal population health and wellbeing.

We simply cannot rest, and we need to constantly improve and innovate with our region, our partners and our community.



WESTERN SYDNEY UNIVERSITY

TODAY

OUR CURRENT STUDENT FOOTPRINT
IN HEALTH RELATED DISCIPLINES

912

Richmond

1,119

Penrith

Health and education precinct
University Psychology Clinics
Infant Testing Lab
Humanitarian and Development Studies
Research Initiative Group

1,065

Blacktown-Mt Druitt
Clinical School

276

International, rural
and other Greater
Sydney locations

Sydney Science Park

604

Westmead

Health and education precinct
MARCS Institute for Brain, Behaviour & Development
NICM Health Research Institute

1,235

Parramatta

Art Therapy Studios
Living Lab
Psychology Testing Lab
Social Work Practice rooms

60

Fairfield

Sydney Olympic Park

**Western Sydney
Airport**

1,170

Liverpool

Health and education precinct

564

Bankstown

Clinical and Health Psychology Research Initiative
Infant Testing Lab

278

Camden

1,049

Campbelltown

School of Medicine
Macarthur Clinical School
Health and education precinct

COMING SOON:


The Macarthur Medical Research Institute
Sports and Health Centre of Excellence



Western Sydney University's, CatalystWest forum in February 2018, saw over 300 health and resilience partners come together to map the coming decades in health, research, urban planning, policy and community.

Western Sydney University's, Dr Genevieve Steiner.

WE WANT TO BE LEADING AUSTRALIA IN THE MODEL OF CARE WE WILL OFFER.



Western Sydney University's, Dr Philippa Collin with Anna Ashendon from the St Vincent de Paul Society.



Western Sydney University's, Professor Kate Stevens explains how the MARCS Institute for Brain, Behaviour and Development is bringing new understandings to the human-technology interface.



GWS Giants' strength and conditioning coach, Simone Freeman and Western Sydney University's, James Kemp (seated) at the CatalystWest 'Health Hack'.



CONVERGENCE OF TRANSLATION AND PRACTICE RESEARCH

The future for Western Sydney University and our region is in genuine research translation and research intertwined with clinical practice. By 2038, health care and research will no longer be separate terms. We won't need to use 'translation' to define our research. It will be inherent in everything that we do. Chronic disease, healthy ageing, maternal and child health will be central concerns.

By 2038, in response to the anticipated four-fold increase in memory-related illness, we will see a network of memory clinics across Western Sydney – providing world-leading diagnosis, care and support for people living with, or at risk of, dementia. Practice that is not just research-informed, but research-led.

Two decades from now, we will have turned the tide on the diabetes tsunami, building on our already well-established and world-renowned diabetes research program in prevention and management of all types of diabetes. Our approach will incorporate relational fields like Urban Planning to build wellbeing and prevention into city design. No longer will diabetes be the debilitating, complex and common illness it currently is. Western Sydney and Western Sydney University will be recognised as the epi-centre for diabetes excellence in the world.

The University will, by 2038, be at the forefront of early language development and communication. We will ensure that our kids are the best and brightest in the world by establishing the very best building blocks of education – language and communication – through training and outreach programs across Western Sydney.

By 2038, we won't need to use 'translation' to define our research. It will be inherent in everything that we do.

We will continue and expand our leadership in the research, accreditation, and integration of complementary medicine, via our ChAFTA-endorsed NICM Health Research Institute.

By 2038, we will have broken the stigma of mental health – which drives issues ranging from eating disorders, post-natal depression and anxiety to suicide and many things in between – and establish appropriate and accessible research-led services across Western Sydney. Engaging with these services will be commonplace and normal as seeing your GP for a cold or flu.

Underpinning these research-led allied health and non-clinical health services will be the most important value of all -- equity. We will work more closely with marginalised communities, including culturally and linguistically diverse and LGBTQI group to co-research and design inclusive, people-centred health services that are based on diverse notions of health. This approach will seek to transform the socioeconomic determinants that lead to poor structural health outcomes. Aboriginal and Torres Strait Islander health will become a stronger priority.

We will ensure that no-one in our community is left behind – which is the true measure of success in any society, now and in the decades ahead.

By 2038, Western Sydney University will be awarded the highest possible ERA ratings of 5 (Well Above World Standard) across our full range of medical and health research disciplines, including Nursing; Public Health and Health Services; Complementary and Alternative Medicine; Clinical Sciences; Neurosciences; Paediatrics and Reproductive Medicine; Cardiorespiratory Medicine and Haematology, reflecting our research growth and focus on the health of Western Sydney and beyond.

We will ensure that no one in our community is left behind – which is the true measure of success in any society.

The University will be recognised as a world leader in research, and most importantly for its impact on clinical practice, in the areas of diabetes, memory-related illness, complementary medicine, early language development and communication, mental health and women's health. This recognition will not only be for the changes achieved in Western Sydney, but the way in which the research conducted in the region has improved clinical outcomes across the globe.



Opening of the Macarthur Clinical School, 2017

THE UNIVERSITY HAS SET ASIDE OVER 37,000 SQM OF STATE-OF-THE-ART COMMERCIAL FACILITIES AT ITS WESTMEAD CAMPUS TO DRIVE RESEARCH-INDUSTRY COLLABORATION WITHIN THE WESTMEAD HEALTH AND MEDICAL RESEARCH SUPER PRECINCT.



EVERY ASPECT OF THE WESTMEAD SITE HAS BEEN SPECIFICALLY DESIGNED TO CREATE A TECHNOLOGY-RICH, VIBRANT AND HIGHLY CONNECTED SPACE — ALL PROVEN TO SUPPORT PRODUCTIVE COLLABORATION.



BETTER ALIGNMENT WITH PLANNING

Western Sydney University is central to the success of a range of large scale government planning, policy and investment priorities across the region over the coming decades. Most notably, we will play a central role in community, industry-attraction and knowledge job commitments under the Western Sydney City Deal, and infrastructure projects linked to the Airport and Aerotropolis.

Community health infuses the full range of government objectives, from better transport, digitally connected cities, improved liveability, services and employment access through to those measures with a direct health link.

Whether through the training of health professionals, by research collaborations, or via the integration of the University's plans into relevant government priorities, the University is working to optimise its relationship with all three levels of government in the interests of achieving better outcomes for the region.

The University is positioning its health benchmarks alongside those of government (TABLE 1), enabling them to be tracked in accordance with the broader and inter-related imperatives of the region. This ensures our work remains engaged and relevant.



TABLE 1

TIMELINES

NSW State Health Plan 2015-2021

Jobs for NSW 'Jobs for the Future' Strategy 2016-2036

Universities Australia Indigenous Strategy 2017-2020

Australia 2030: Prosperity through Innovation 2018-2030

State Infrastructure Strategy 2018-2038

Western Sydney City Deal 2018-2038

TfNSW Future Transport Strategy 2018-2056

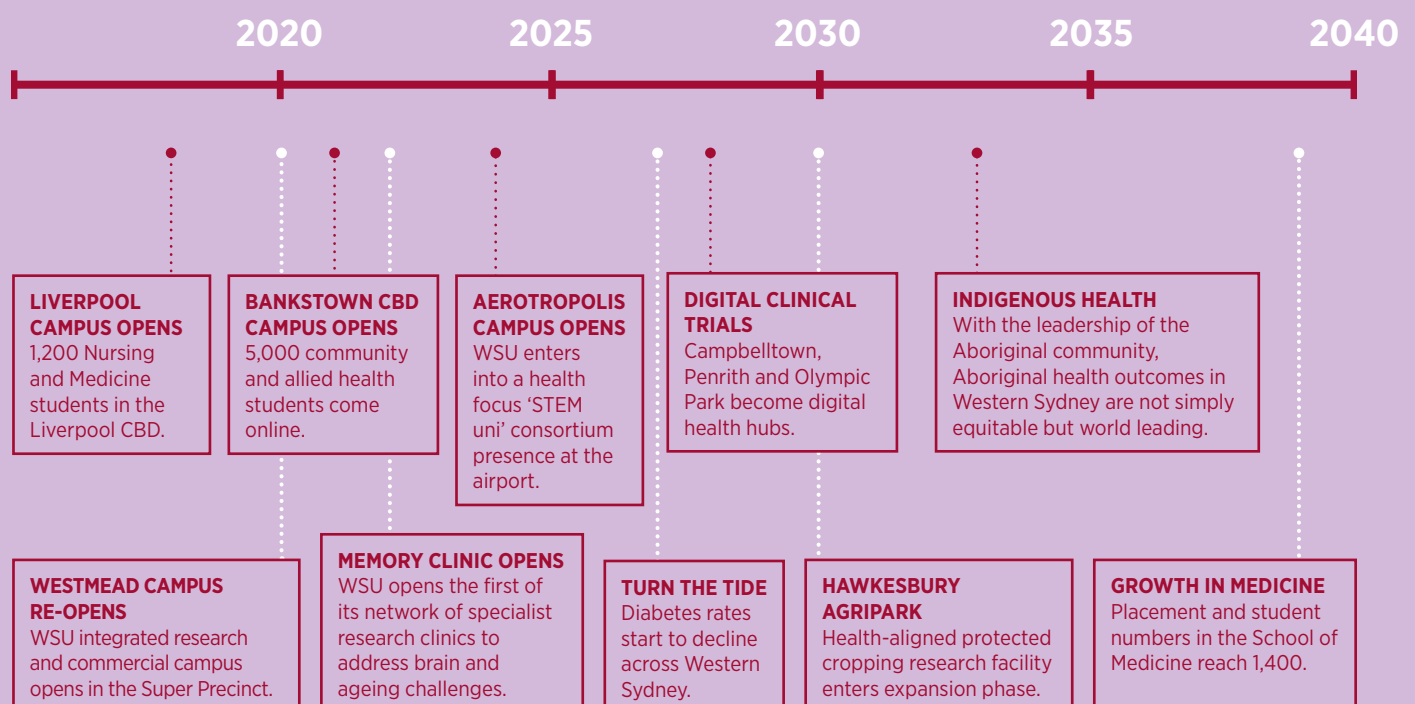
A Metropolis of Three Cities Plan 2018-2058

North South Rail Link from St Marys to Western Sydney Airport Construction 2019-2026

Sydney Metro West Construction Starts 2022

Sydney Southwest Metro Line Opens 2024

Western Sydney Airport Opens 2026



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